

Abstract

This invention provides for a novel orthopedic prosthesis, specifically a prosthetic tibial component for a prosthetic total knee joint, that comprises two constructs, one being a metal base construct that engages the bone and the other being a polyethylene bearing construct that attaches to the metal base construct and articulates with a femoral prosthetic component on the opposing side of the joint. The metal base construct is composed of two different metals, one of which engages the bone surface and the other of which engages the polyethylene bearing construct. Each of these metals is selected so that its characteristics are well suited to its particular function. More particularly, the first metal (i.e., the one that engages the bone surface) is selected so as to provide a superior bone-engaging face, while the second metal (i.e., the one that engages the polyethylene bearing construct) is selected so as to provide a superior polyethylene-engaging face. By combining the different material characteristics of

two different metals in the metal bone construct, it is possible to simultaneously form a superior bone-engaging face and a superior polyethylene-engaging face.